

County of Orange Health Care Agency

HIV/AIDS SURVEILLANCE STATISTICS, 2002



Issued September 2004

*Prepared by:
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Disease Control & Epidemiology Division
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EXECUTIVE SUMMARY

As of December 2002, California had reported 128,064 cumulative AIDS cases to the Centers for Disease Control and Prevention (CDC), the second highest state total following New York State. The cumulative number of AIDS cases reported by Orange County by the end of 2002 was 6,206 (representing 4.8% of California's cases, and ranking fifth among fifty-eight California counties).

AIDS CASES

- Between 1981 and 2002, there have been 6,206 AIDS cases reported in Orange County, of which 2,928 are living.
- Two hundred and sixty-eight (268) new AIDS cases were reported in 2002.
- The distribution of Orange County AIDS cases by race/ethnicity compared to the distribution of U.S. cumulative cases shows a higher percentage of White males (66% for Orange County and 41% for U.S.) .
- While the majority of Orange County cases continue to be male (87% of 1998-2002 cases) female cases have increased from 8% reported prior to 1998 to 13% of cases in 2002.
- There has been an increase in the proportion of people of color (Hispanic, African American, Asian Pacific Islander and American Indian) reported with AIDS over time (15% in the period from 1981-87 to 51% in recent 5 years).
- Though the majority of reported cases are still attributable to men having sex with men (80% of 1998-2002 cases), there have been changes in the risk profile of persons reported with AIDS. The proportion of cases attributable to injection-drug use (IDU) has increased from 11% (prior to 1998) to 14% in recent 5 years, and heterosexual contact has increased from 5% (prior to 1998) to 10% in recent 5 years.
- With the advancement of available therapies, AIDS death rates have declined from 4.2 per 100,000 in 1997 to 1.9 per 100,000 in 2001, a 55% decrease in the death rate.

HIV REPORTING

- Non-name code-based HIV reporting began in California on July 1, 2002. In the first fifteen months of reporting, 1,215 HIV cases were reported in Orange County.
- Using the guidelines established by the Centers for Disease Control and Prevention (CDC), it has been estimated that approximately 8,200 people with HIV/AIDS are currently living in Orange County as of December 2002, of which 5,492 are estimated to be diagnosed cases of HIV/AIDS; the remaining 2,708 individuals are assumed to be unaware of their HIV status.

HIV TESTING

- HIV Testing and Counseling services offered in Orange County include anonymous, confidential, and methadone/drug clinic testing. These testing sites, operated by the Health Care Agency, have been operational since 1985. Since 1985, 280,466 tests have been performed with a cumulative seropositivity of 1.6%.
- In 2002, 13,509 HIV tests were performed; of these 121 tests (0.9%) were positive.
- Persons who seek HIV counseling and testing services are predominantly males.
- A larger proportion of Hispanics and African-Americans tested were HIV-positive, relative to Whites.

AIDS SUMMARY SHEET, ORANGE COUNTY, December 2002

	Cumulative AIDS Cases # (%)	Cumulative Deaths # (%)	Living Cases # (%)	Cumulative Case Fatality Rate (%)
Total Cases	6,206	3,278	2,928	53
Adult	6,164 (99)	3,259 (99)	2,905 (99)	53
Pediatric	42 (<1)	19 (<1)	23 (<1)	45
ADULT Cases by Mode of Transmission				
	4,425 (72)	Men having Sex with Men (MSM)/Bisexual Contact		
	702 (11)	Injection Drug Use		
	372 (6)	Men having Sex with Men and Inject Drugs (MSM/IDU)		
	357 (6)	Heterosexual Contact		
	36 (<1)	Hemophilia/Coagulation Disorder		
	81 (1)	Receipt of Blood, Components, or Tissues		
	191 (3)	Risk not Reported/Unknown		
PEDIATRIC Cases by Mode of Transmission				
	6 (14)	Hemophilia/Coagulation Disorder		
	29 (69)	Perinatal (Mother with/at risk for HIV infection)		
	5 (12)	Receipt of Blood, Components or Tissues		
	2 (5)	Risk not Reported/Unknown		
Cases by ETHNICITY/RACE				
	4,086 (66)	White		
	309 (5)	African-American		
	1,661 (27)	Hispanic		
	119 (2)	Asian/Pacific Islander (A/PI)		
	13 (<1)	American-Indian/Alaska Native		
	18 (<1)	Other/Unknown		
Cases by GENDER # (%)				
5,658 (91)	Male	548 (9)	Female	
Cases by AGE (at the time of AIDS diagnosis) # (%)				
25 (<1)	Under 5 years	2,779 (45)	30–39 years	
11 (<1)	5–12 years	1,482 (24)	40–49 years	
22 (<1)	13–19 years	701 (11)	50+ years	
1,186 (19)	20–29 year			
Comparison of AIDS Case Rates				
	Cases 2002	Rate per 100,000	Cumulative Cases as of 12/2002	
Orange County	268	9.1	6,206	
California	4,364	12.4	128,064	
USA	43,950	15.0	859,000	
Source: HARS, 2002; CA and US Rates: CDC, HIV/AIDS Surveillance Report, Volume 14				

1. OVERVIEW OF AIDS IN ORANGE COUNTY

As of December 31, 2002, a cumulative total of 6,206 AIDS cases were diagnosed and reported in Orange County. This number comprises 4.8% of California cases ($n=128,064$) and 0.7% of cases reported nationally ($n=859,000$). Orange County ranks fifth among 58 California counties in cumulative AIDS cases reported through 2002. Table 1 presents the characteristics of AIDS cases in Orange County, California and the United States.

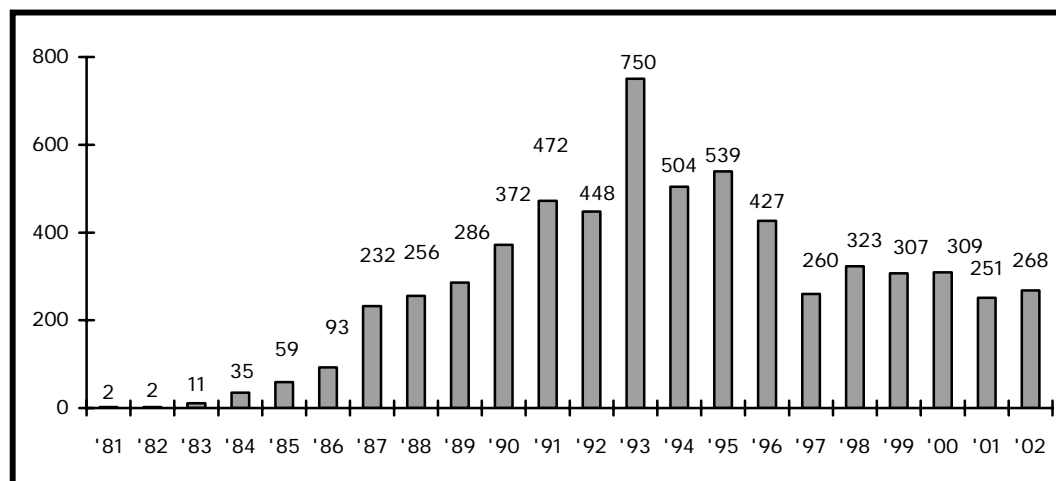
- Eighteen (18%) percent of U.S. cumulative cases are female compared to 9% of Orange County cases and 8% of California cases. Thus, males represent a greater proportion of AIDS cases in California and Orange County than the U.S. as a whole.
- Whites comprise the largest proportion of AIDS cases in Orange County (66%), in California (59%) and the U.S. (41%). Twenty-seven percent (27%) of Orange County cases are Hispanic, compared to 21% of California cases and 19% of U.S. cases. African-Americans represent 5% of cases in Orange County, 17% of cases in California, and 39% of U.S. cases. The proportion of cases among Asian/Pacific Islanders (API) remains very low in all three jurisdictions (2% or less).
- Men having sex with men (MSM) represent the largest known exposure category for Orange County (72%), California (69%), and U.S. cases (45%). Six percent (6%) of U.S. and Orange County cases are men who have sex with men and also reported injection-drug use (MSM/IDU), while 9% of California cases were MSM/IDU. Cases attributed to injection drug use (IDU) alone are lower in California and Orange County (11% each) relative to U.S. cases (25%). Six percent (6%) of Orange County and 5% of California cases were attributed to heterosexual contact compared to 12% of U.S. cases.

Table 1. Characteristics of Cumulative AIDS Cases in Orange County, California, and the United States, 1981-2002

	Orange County (n=6,202)		California (n=128,196)*	United States (n=859,000)
	Number	%	%	%
Gender				
Male	5658	91%	92%	82%
Female	548	9%	8%	18%
Race/Ethnicity				
White	4086	66%	59%	41%
African-American	309	5%	17%	39%
Hispanic	1661	27%	21%	19%
Asian/PI	119	2%	2%	<1%
American-Indian	13	<1%	<1%	<1%
Other	18	<1%	<1%	<1%
Mode of Transmission				
Adult/Adolescent				
MSM	4425	72%	69%	45%
IDU	702	11%	11%	25%
MSM-IDU	372	6%	9%	6%
Heterosexual	357	6%	5%	12%
Hemophilia	36	<1%	<1%	<1%
Transfusion Recipient	81	1%	1%	1%
Other/risk not reported	181	3%	5%	10%
Pediatric				
Hemophilia	6	14%	9%	3%
Transfusion	5	12%	20%	4%
Prenatal	29	69%	68%	91%
Other/risk not reported	2	5%	3%	2%
Sources: OC: HIV/AIDS Reporting System, 2002; CA: www.dhs.ca.gov/AIDS/ ; US: CDC, HIV/AIDS Surveillance Report 2002; 14 & www.cdc.gov/HIV/stats.htm				
* Cumulative AIDS cases enumerated by the State Office of AIDS, CA, are higher (n=128,196) than those reported by the CDC and presented elsewhere in this report (n=128,064). Breakdown by race/ethnicity and mode of transmission for Orange County and CA is not available in the CDC's HIV/AIDS Surveillance Report 2002; 14				

2. AIDS IN ORANGE COUNTY

2.1. Overall AIDS Case Reporting



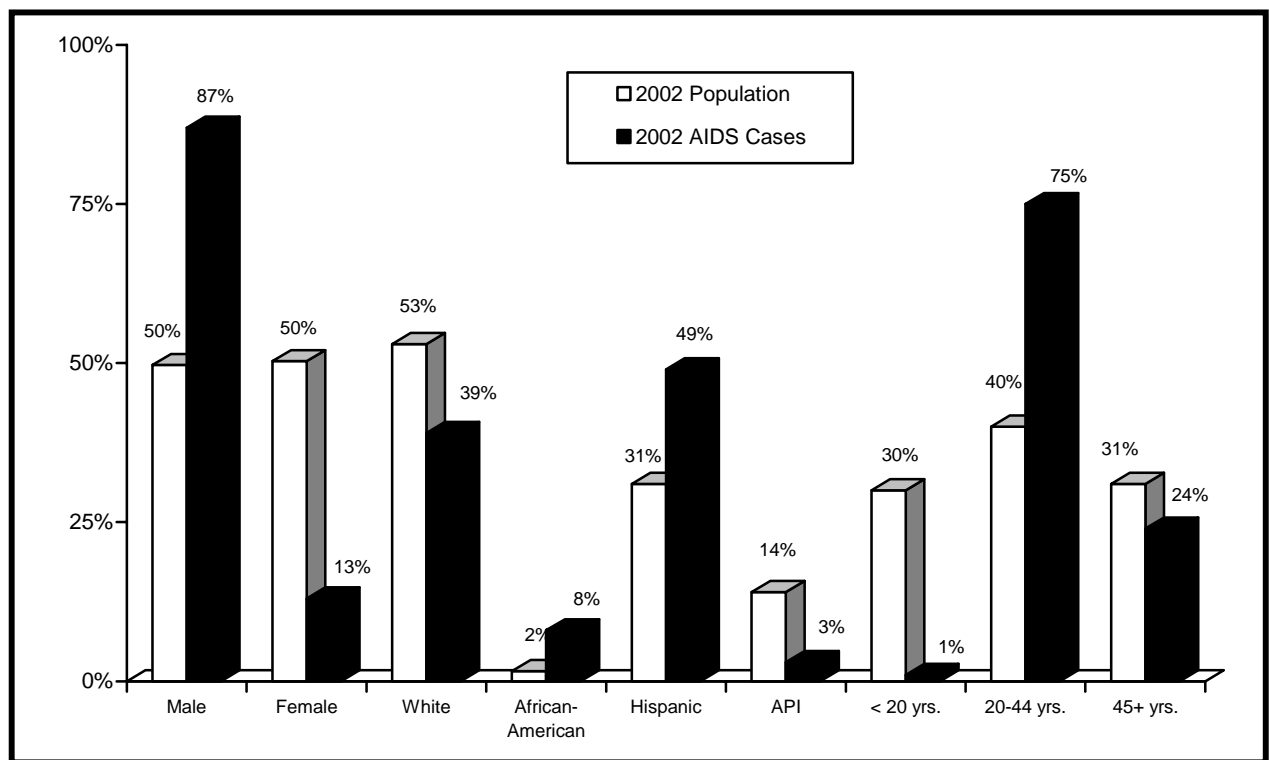
Source: HIV/AIDS Reporting System (HARS), 2002

Figure 1. AIDS Cases by Year of Report, Orange County, 1981-2002

The first Orange County AIDS case was reported in 1981 and, as shown in Figure 1, cases continued to rise each year until 1993, except for the slight decrease in 1992. Seven-hundred and fifty (750) AIDS cases were reported in Orange County in 1993 following the expansion of the AIDS surveillance case definition implemented in January of that year. In 2002, Orange County reported 268 AIDS cases, an increase of 7% from the 251 cases reported in 2001. However, the number of cases reported in 2002 was lower than the number reported in each of the preceding three years (1998–2000). Increased case reporting in those years is thought to be partially related to improved surveillance efforts using computer-generated lists of patients with AIDS diagnoses. The relatively lower number of reported cases since 1997 most likely reflects the waning effect of the expanded 1993 AIDS surveillance case definition, and slower progression from HIV infection to AIDS attributable to recent treatment advances such as the use of combination antiretroviral therapies, including protease inhibitors.

2.2. Demographic Distribution of AIDS Cases in the Population

The distribution of AIDS cases by ethnicity, gender and age compared to the population of Orange County in 2002 is presented in Figure 2. This depicts a disparity among various sub-populations in terms of their representation in the population versus their representation in the AIDS epidemic. Proportionally, cases among males, Hispanics, African-Americans and persons in the 20–44-year-old age group are over-represented among persons with AIDS, while Asians and Whites are under-represented.



Source: HIV/AIDS Reporting System (HARS), 2002; DOF 2003

Figure 2. Distribution of Reported AIDS Cases vs. Population Distribution, Orange County, 2002

3. TRENDS IN AIDS REPORTING

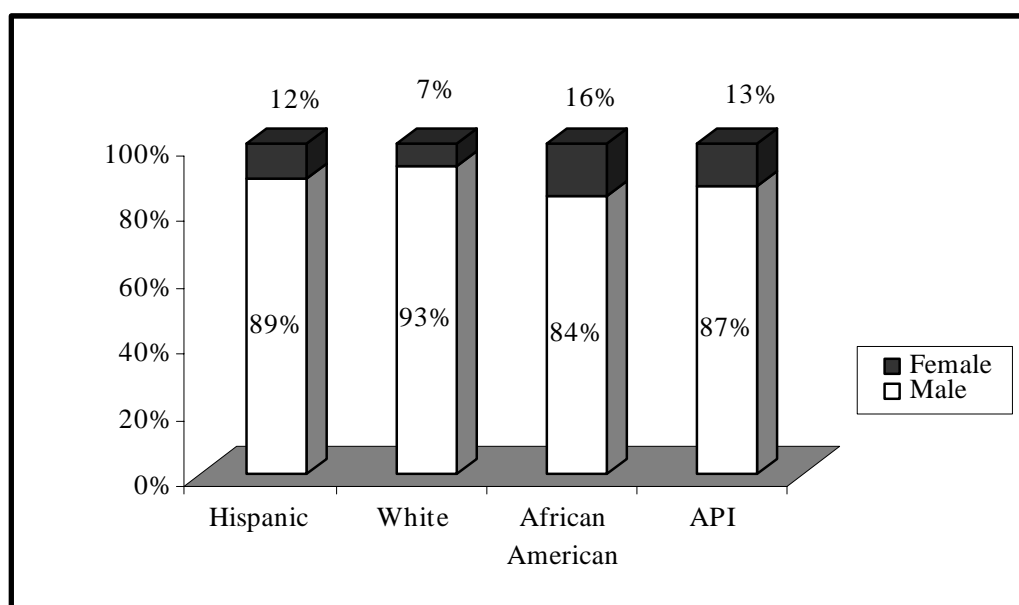
3.1. AIDS Cases by Gender

Table 2. Comparison of Reported AIDS Cases by Gender: 1981-2002 vs. Recent 5 years (1998-2002)

Cumulative AIDS Cases (1981-2002) (n=6,202)		Recent AIDS Cases (1998-2002) (n=1,458)	
<i>Male # (%)</i>	<i>Female # (%)</i>	<i>Male # (%)</i>	<i>Female # (%)</i>
5,658 (91)	548 (9)	1,276 (87)	182 (13)

Source: HIV/AIDS Reporting System (HARS), 2002

- While the majority of AIDS cases reported in Orange County are among males, AIDS cases among females have increased over time.
- The distribution of adult/adolescent Orange County AIDS cases by gender varies by ethnicity. Among females, higher proportions of cumulative AIDS cases through December 2002 were among African-Americans (16%), Hispanics (12%), and API (13%) compared to Whites (7%), as shown in Figure 3.

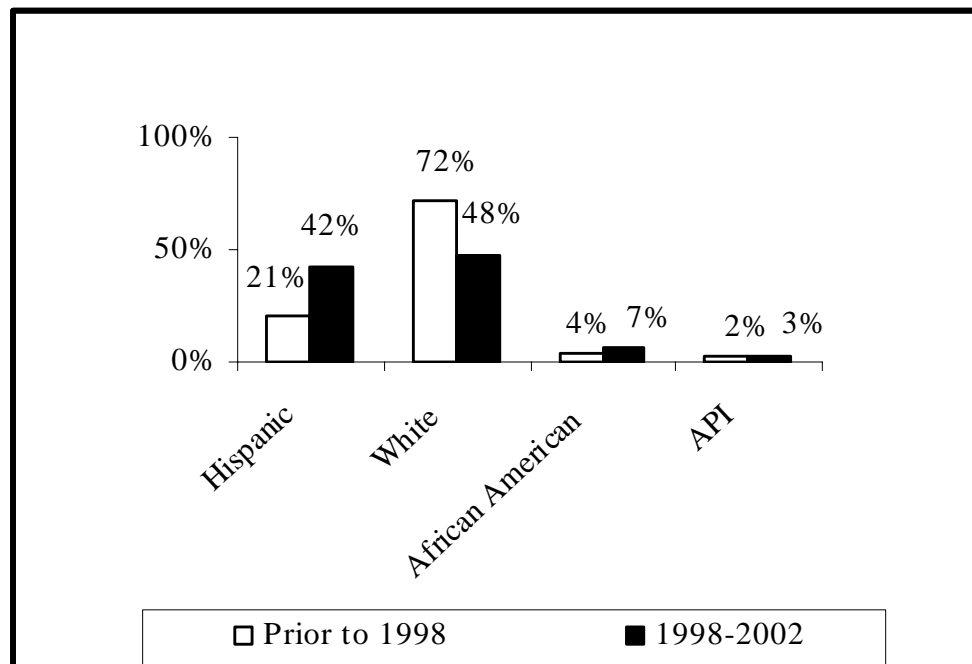


Source: HIV/AIDS Reporting System (HARS), 2002

Figure 3. Cumulative AIDS Cases by Gender and Race/Ethnicity, Orange County, 1981-2002

3.2. AIDS Cases by Race/Ethnicity

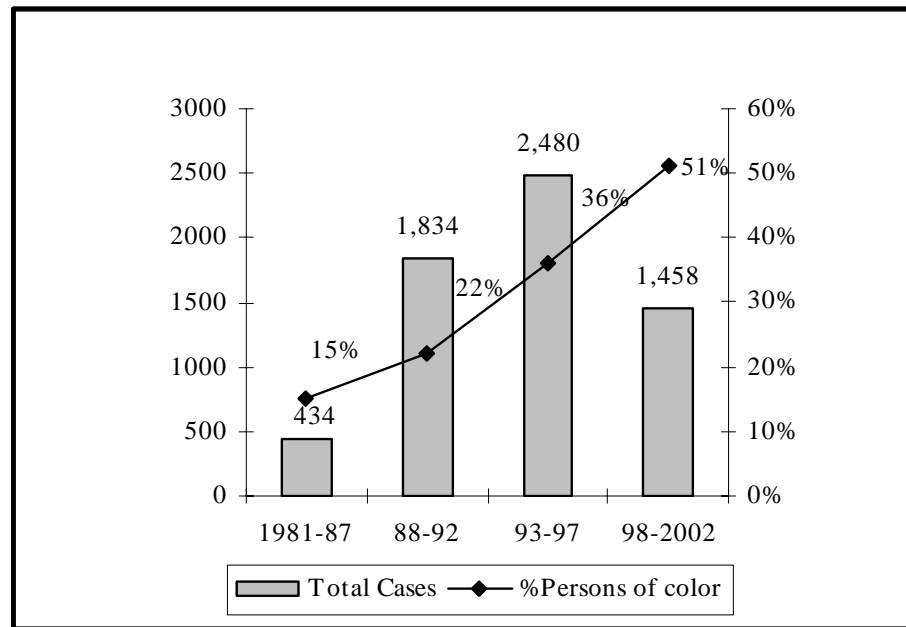
- Figure 4 presents the trends in AIDS case reporting by race/ethnicity by comparing data in recent years (1998–2002) to data prior to 1998. Case reporting in Hispanic, African-American and API populations has increased proportionally over time, while reporting among Whites has declined in recent years.



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 4. Comparison of AIDS Cases by Race/Ethnicity and Year of Report, Orange County, 2002

- The data in Figure 5 presents the increase in the proportion of reported AIDS cases in persons of color over time; the proportion of cases in the non-White population has increased from 15% of cases during 1981–1987 to 51% of cases in the more recent years (1998–2002).

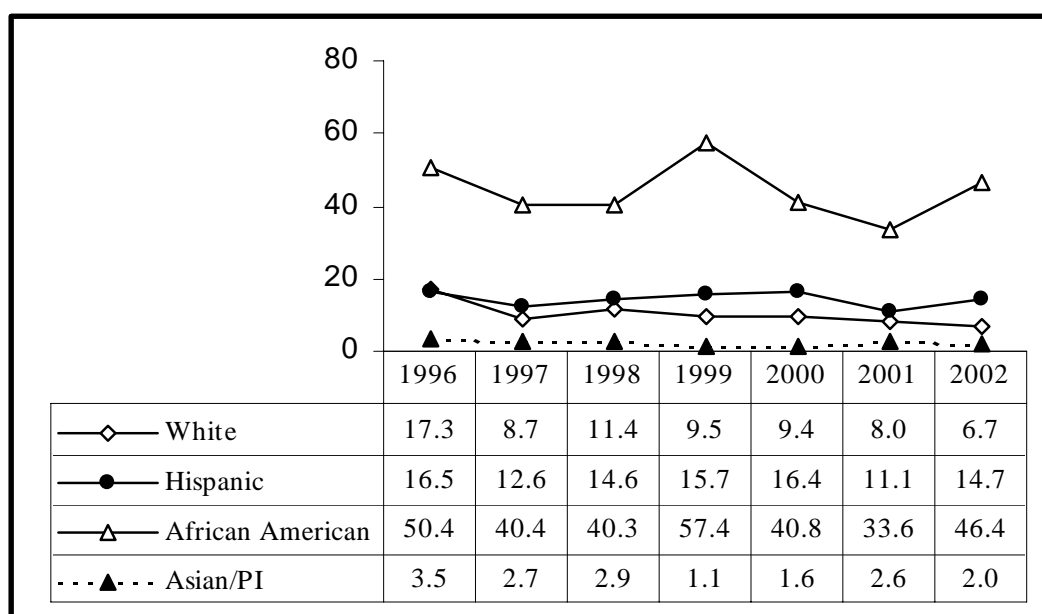


Source: HIV/AIDS Reporting System (HARS), 2002

Figure 5. Number of New AIDS Cases and Percent Attributed to People of Color Over Time, Orange County, 2002

Figure 6 presents trends in AIDS case rates per 100,000 population by race/ethnicity and year of report:

- African-Americans have the highest case rate, followed by Hispanics.
- Compared to 1996, the decline in case rates in 2002 was 61% for Whites, 43% for APIs, 11% for Hispanics, and 8% for African-Americans.

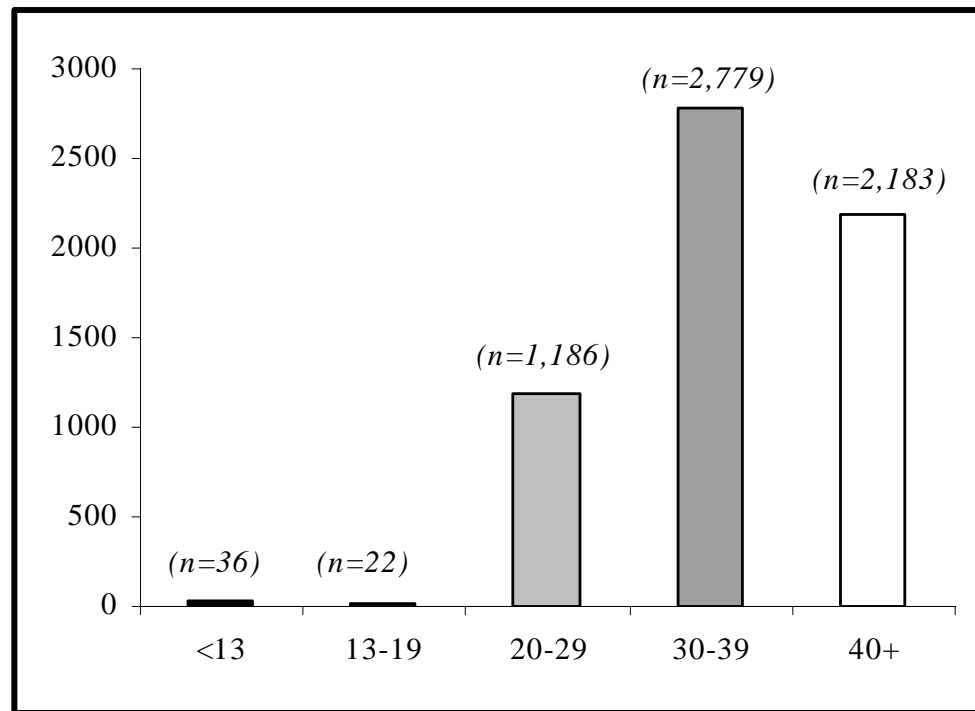


Source: HIV/AIDS Reporting System (HARS), 2002; Population: DOF, 1998

Figure 6. AIDS Case Rates per 100,000, by Race/Ethnicity, Orange County, 1996–2002

3.3. AIDS Cases by Age at Diagnosis

- Consistent with national, state and local trends, the largest number of AIDS cases in Orange County are diagnosed in the 30–39 age-group; 45% of cumulative cases reported through December 2002 were among persons in this age cohort.



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 7. Cumulative AIDS Cases by Age at Diagnosis, Orange County, 1981-2002

Table 3. Percent Distribution of AIDS Cases by Gender, Race/Ethnicity and Age at Diagnosis, 1981-2002

Age Category at AIDS Diagnosis						
	0-12	13-24	25-29	30-34	35-39	40+
Cumulative Cases (1981-2002)	<1%	4%	16%	23%	22%	35%
Male						
All Males	<1%	3%	16%	23%	22%	35%
Hispanic	1%	7%	22%	25%	19%	26%
African American	<1%	2%	12%	23%	26%	36%
White	<1%	2%	14%	22%	23%	39%
API	1%	4%	18%	17%	21%	38%
Female						
All Females	3%	6%	16%	21%	21%	34%
Hispanic	4%	9%	18%	25%	16%	28%
African-American	4%	0%	8%	20%	35%	33%
White	2%	4%	15%	18%	23%	38%
API	7%	7%	27%	27%	13%	20%
Source: HIV/AIDS Reporting System (HARS), 2002						

- In Hispanic male AIDS cases and in API female AIDS cases, a higher percentage are diagnosed at ages 25–29 compared to the other ethnic groups.

Pediatric AIDS in Orange County

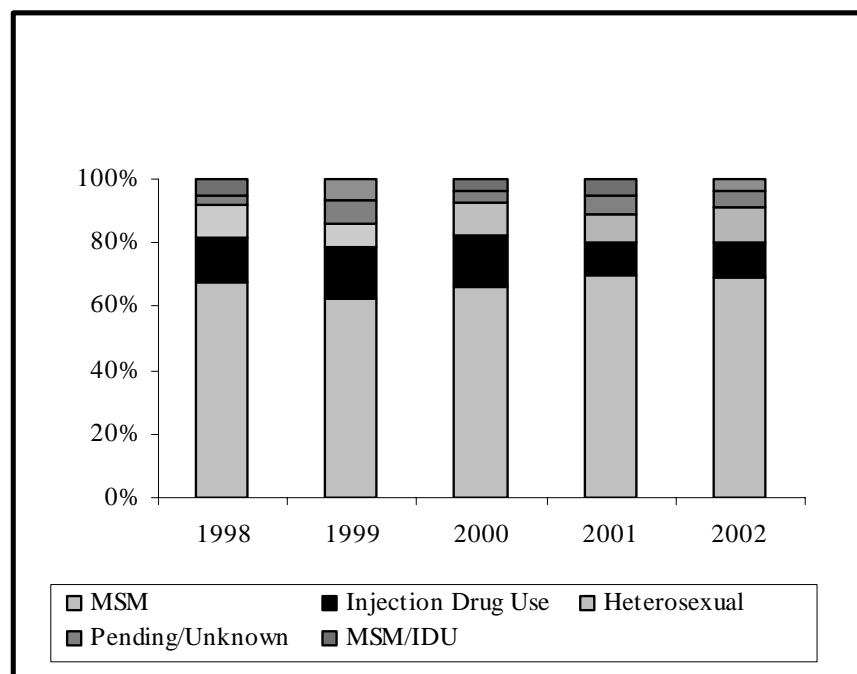
- A total of 42 pediatric cases (under the age of 13) have been reported in Orange County, representing less than 1% of total AIDS cases reported through December 2002. Of those 42 cases, 6 were diagnosed with AIDS as adult/adolescent but had evidence of being HIV-infected as children.
- Most of the pediatric cases are attributed to prenatal transmission (29 out of 42).

AIDS Cases in Adolescents in Orange County

- Twenty-two cases of AIDS have been reported in adolescents (13–19 years); seven cases each were attributed to receipt of blood products or MSM contact (32% each), and three (14%) to heterosexual transmission.

3.4 . AIDS Cases by Mode of Transmission

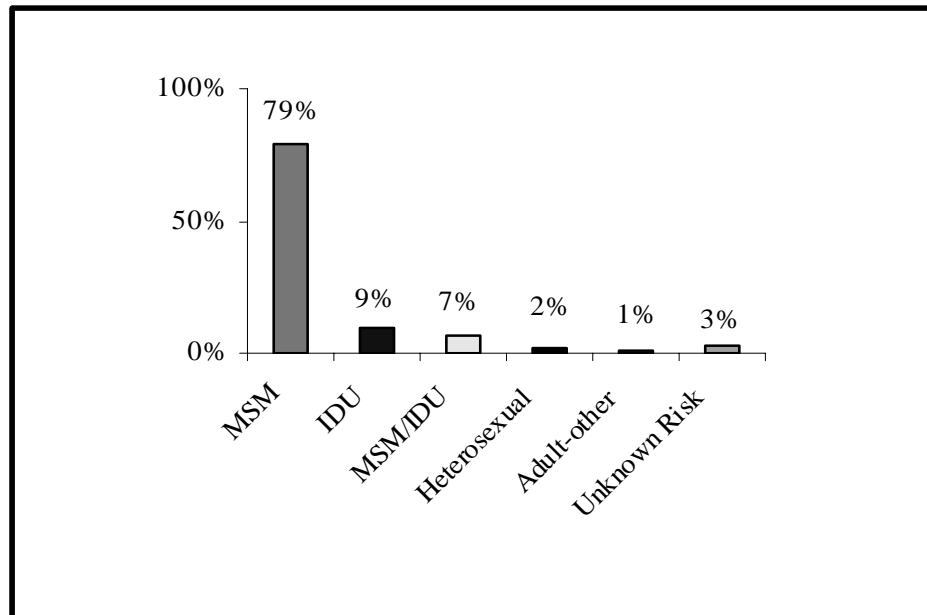
- The largest transmission mode continues to be among MSM, followed by IDU, as Figure 8 indicates.



Source: HIV/AIDS Reporting System (HARS), 2002

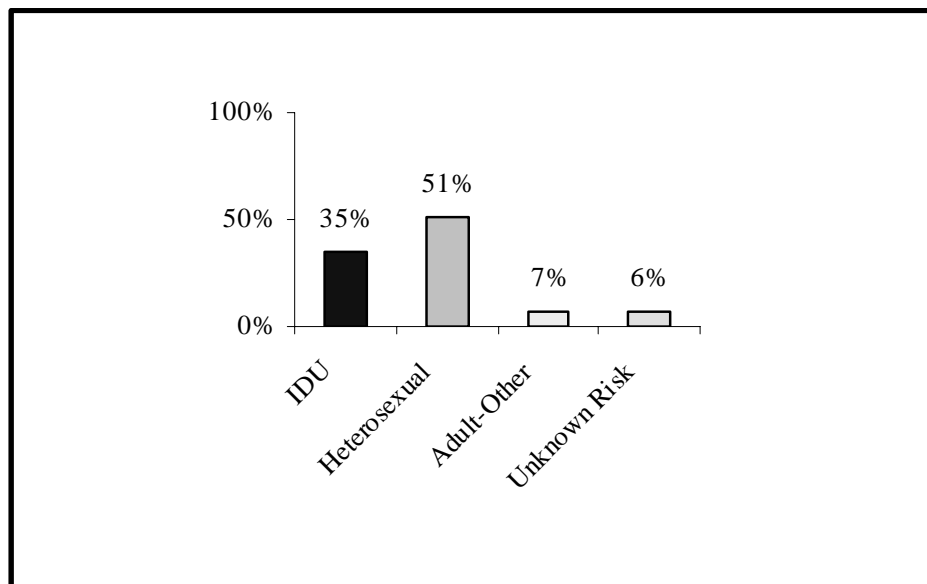
Figure 8. Mode of Transmission by Year of Report, Orange County, 1998–2002

- Cumulative male cases are mostly MSM (79%), followed by IDU (9%), MSM/IDU (7%), unknown risk (3%), and heterosexual (2%) as shown in Figure 9.
- As shown in Figure 10, 51% of cumulative cases in females are attributed to heterosexual transmission, followed by IDU (35%), other risk (7%) and unknown risk (6%).



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 9. Cumulative Male AIDS Cases by Mode of Transmission, Orange County, 1981-2002

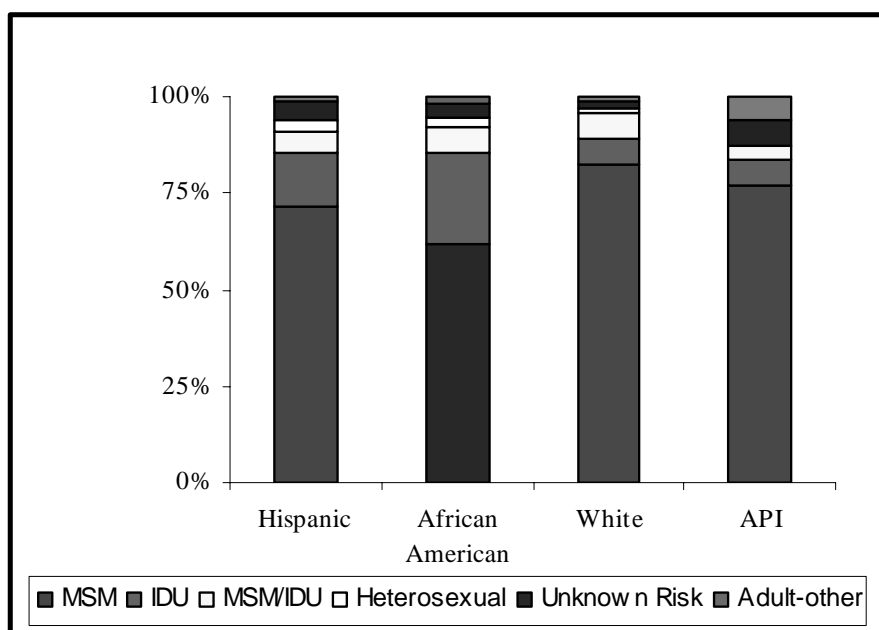


Source: HIV/AIDS Reporting System (HARS), 2002

Figure 10. Cumulative Female AIDS Cases by Mode of Transmission, Orange County, 1981-2002

Figure 11 presents cumulative male adult and adolescent AIDS cases by mode of transmission and race/ethnicity. As previously mentioned, MSM remains the largest transmission mode for all ethnic groups; however, some differences are noted as follows:

- Among White males 82% of reported cases were among MSM, this transmission category accounted for 77% of API, 72% of Hispanic, and 62% of African-American cases.
- Men having sex with men in combination with injection-drug use (MSM/IDU) was reported in 7% of White and African-American males, 6% of Hispanic, and 4% of API males.
- Among males, injection-drug use alone was the mode of transmission for 23% of African-American, 14% of Hispanic, 7% of API, and 6% of White cases.
- Heterosexual transmission was reported in 3% of Hispanic, and 2% of African-American male case ; for other groups this proportion was even lower.

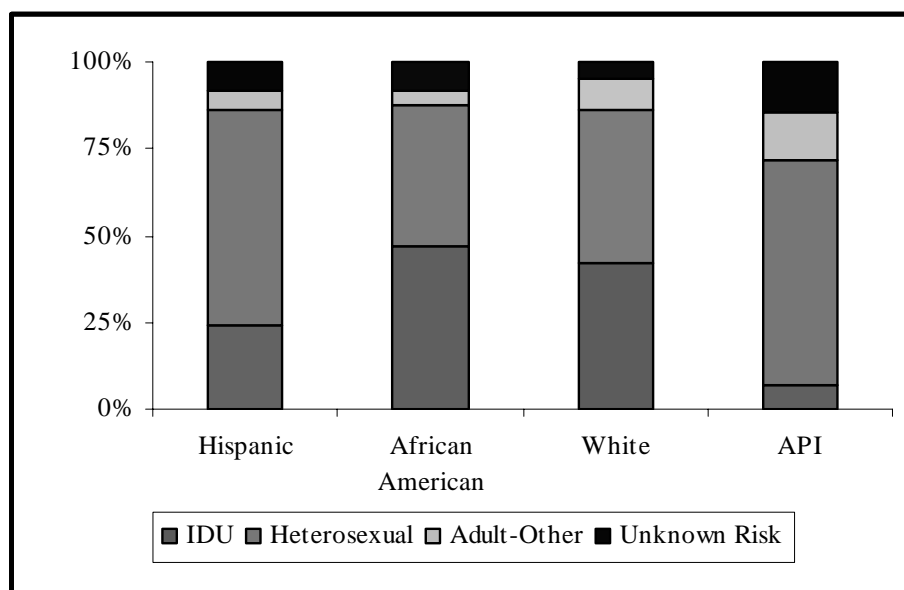


Source: HIV/AIDS Reporting System (HARS), 2002

Figure 11. Cumulative Male AIDS Cases by Mode of Transmission and Race/Ethnicity, Orange County, 1981-2002

Figure 12 presents cumulative female adult and adolescent AIDS cases by transmission mode and race/ethnicity. The breakdown of cases is as follows:

- Heterosexual transmission was reported in 63% of Hispanic cases, 44% of White, 41% of African American, and 64% (9 out of 14 cases) of API cases .
- Forty-seven percent of cases were attributed to IDU among African Americans, 42% among Whites, and 24% among Hispanics.
- Unknown risk factors were involved in 8% each of African American and Hispanic cases , and 5% among Whites.
- The adult/other risk category accounted for the remaining cases.



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 12. Cumulative Female AIDS Cases by Mode of Transmission and Race/Ethnicity, Orange County, 1981-2002

3.4.1. Trends in Mode of Transmission

Table 4 presents a comparison of reported AIDS cases prior to 1998, cases reported in the most recent 5-year period (1998–2002), and the cumulative AIDS cases through December 2002 by gender and mode of transmission.

- Mode of transmission for adult males indicates that although MSM represent the largest transmission risk factor in both time periods, there is some decreasing trend in MSM transmission in the more recent years.
- Compared to the cases reported prior to 1998, the proportion of male cases attributed to heterosexual transmission has increased in recent years .
- Heterosexual transmission is the largest transmission category for females, increasing from 46% of cases prior to 1998 to 55% in recent years.
- Injection drug use is the second most frequent transmission category in adult and adolescent females, but has decreased slightly in recent years.
- Risk remains unknown more so for female than for male cases.
- Pediatric cases have remained low over time.

Table 4. AIDS Cases by Gender, Mode of Transmission, and Time Period of Reporting, Orange County, 2002

	Mode of Transmission	Cases			Percent (%)		
		Prior to '98	'98-02	Cumulative 1981-2002	Prior to '98	'98-02	Cumulative 1981-2002
Male							
	Adult/Adolescent						
	MSM	3,469	956	4,425	79%	75%	78%
	IDU	372	143	515	9%	11%	9%
	MSM/IDU	303	69	372	7%	5%	7%
	Heterosexual	48	39	87	1%	3%	2%
	Adult (other)	69	9	78	2%	<1%	1%
	Unknown Risk	103	54	157	2%	4%	3%
	Pediatric (all modes)	18	6	24	<1%	<1%	<1%
	Total Male Cases	4,382	1,276	5,658			
Female	Adult/Adolescent						
	IDU	132	55	187	36%	30%	34%
	Heterosexual	169	101	270	46%	55%	49%
	Adult (other)	34	5	39	9%	3%	7%
	Unknown Risk	19	15	34	5%	8%	6%
	Pediatric (all modes)	12	6	18	3%	3%	3%
	Total Female Cases	366	182	548			

Source: HIV/AIDS Reporting System (HARS), 2002

3.4.2. Trends in Mode of Transmission by Race/Ethnicity

Trends in mode of transmission by race/ethnicity and gender are presented in Tables 5 and 6. These tables compare percent distribution of AIDS cases reported prior to 1997 to those reported in 2002.

Table 5. Percent Distribution of Male AIDS Cases by Mode of Transmission and Race/Ethnicity, Orange County: Reported Prior to 1997 and in 2002

Male	Hispanic (%)		African-American (%)		White (%)		API (%)	
	Prior '97	2002	Prior '97	2002	Prior '97	2002	Prior '97	2002
MSM	71%	82%	64%	65%	82%	78%	77%	67%
IDU	14%	9%	22%	24%	6%	8%	5%	17%
MSM/IDU	6%	3%	8%		7%	5%	3%	17%
Heterosexual	2%	2%	2%		1%	5%		
Other (Adult)	1%	0%	1%	6%	2%		8%	
Unknown Risk	4%	4%	3%	6%	2%	3%	6%	
Pediatric	<1%		<1%		<1%		2%	
Total # of cases	857	115	162	17	3,048	92	64	6
Percentages in italics denote low cell counts less than 3.								
Source: HIV/AIDS Reporting System (HARS), 2002								

Table 6. Percent Distribution of Female AIDS Cases by Mode of Transmission, and Race/Ethnicity, Orange County: Reported Prior to 1997 and in 2002

Female	Hispanic (%)		African-American (%)		White (%)		API (%)	
	Prior '97	2002	Prior '97	2002	Prior '97	2002	Prior '97	2002
IDU	31%	12%	48%	50%	39%	33%		
Heterosexual	51%	76%	35%	50%	42%	50%	63%	5%
Other (Adult)	8%	6%	3%		12%		25%	
Unknown Risk	6%	6%	6%		4%	17%	13%	50%
Pediatric	4%		6%		3%			
Total # of cases	100	17	31	4	198	12	8	2
Percentages in italics denote low cell counts less than 3.								
Source: HIV/AIDS Reporting System (HARS), 2002								

4. HEALTH OUTCOMES

4.1 Opportunistic Infections

Table 7 lists the indicator conditions diagnosed in Orange County residents with an AIDS diagnosis. Multiple opportunistic or indicator diseases can occur in one individual; therefore, the total episodes exceed the number of AIDS cases.

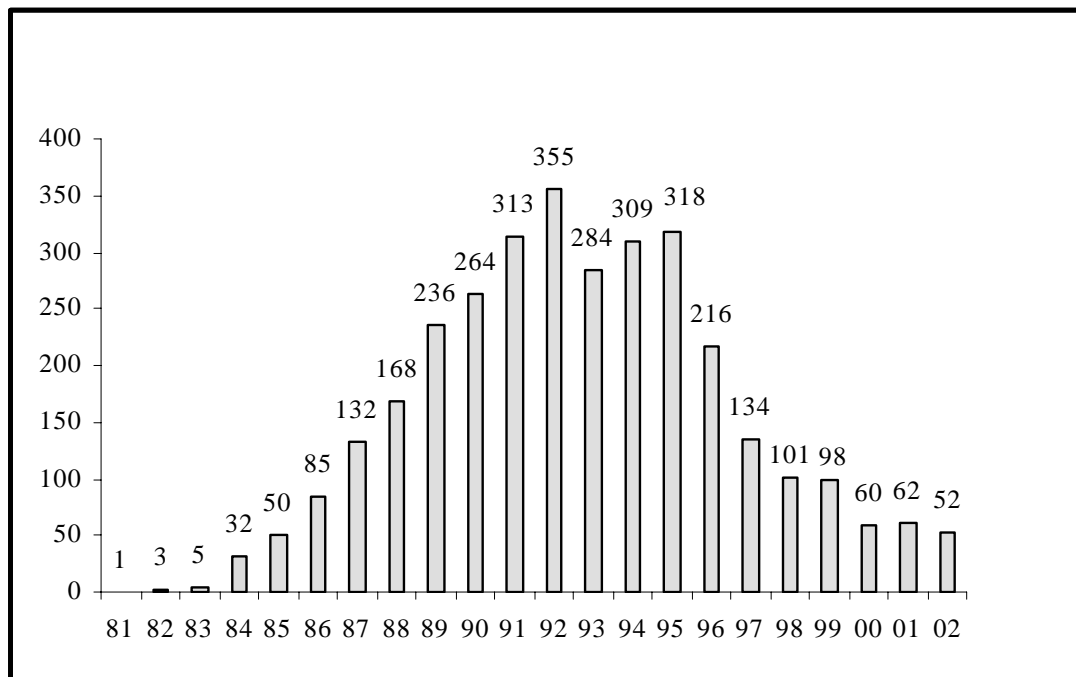
Table 7. Frequency of Indicator Diseases among Reported AIDS Cases, Orange County, 2002

Indicator Conditions	Definitive	Presumptive	Total	Percent of cases with condition
CD4 immune deficiency*	3,624	--	3,624	59%
<i>Pneumocystis carinii</i> pneumonia	1,458	435	1,893	31%
Wasting syndrome	1,020	--	1,020	16%
Kaposi's sarcoma	486	186	672	11%
Candidiasis, esophageal	258	334	592	10%
<i>Mycobacterium avium</i> complex	451	43	494	8%
Cytomegalovirus disease	427	--	427	7%
Herpes simplex	360	--	360	6%
HIV encephalopathy	313	--	313	5%
Cytomegalovirus retinitis	136	119	255	4%
Cryptococcosis	246	--	246	4%
Lymphoma, immunoblastic	175	--	175	3%
Cryptosporidiosis	160	--	160	3%
Candidiasis, bronchi or lungs	125	--	125	2%
Pulmonary Tuberculosis	110	15	125	2%
Toxoplasmosis of brain	76	94	170	3%
M. Tuberculosis	90	6	96	2%
Pneumonia, recurrent	56	41	97	2%
<i>Mycobacterium</i> , other species	57	16	73	1%
PM leukoencephalopathy	54	--	54	1%
Lymphoma, primary in brain	45	--	45	1%
Histoplasmosis	34	--	34	1%
Lymphoma, Burkitt's	28	--	28	<1%
Coccidioidomycosis	20	--	20	<1%
Isosporiasis	17	--	17	<1%
<i>Salmonella</i> septicemia	17	--	17	<1%
Cervical carcinoma	8	--	8	<1%
Lymphoid interstitial pneumonia	5	1	6	<1%
Bacterial infections	3	--	3	<1%
Source: HIV/AIDS Reporting System (HARS), 2002				
*CD4 count <200				

- In Orange County, immunodeficiency is the most frequently occurring indicator condition, followed by *Pneumocystis carinii* pneumonia.

4.2 Mortality Status

According to the HIV/AIDS Reporting System (HARS), the number of deaths among persons reported with AIDS in Orange County increased steadily through 1992, but has since declined. There was a dramatic decrease in AIDS deaths between 1995 and 1997, and deaths have remained low since that time. This decrease reflects both the leveling of case reports as well as improved survival attributable to recent improvements in medical care, especially the introduction of highly active antiretroviral therapy (HAART). Figure 13 shows the number of AIDS deaths in persons reported with AIDS between 1981 and 2002. As of December 31, 2002, the cumulative number of deaths reported was 3,278, which represented 53% of the 6,206 cases reported with AIDS.



Source: HIV/AIDS Reporting System (HARS), 2002

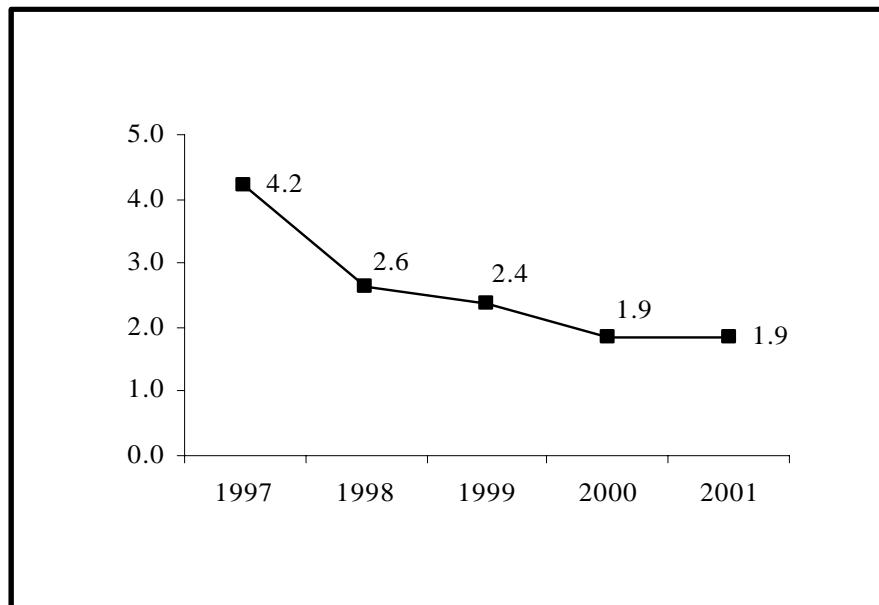
Figure 13. Deaths Among Persons Reported with AIDS by Year of Occurrence, Orange County, 1981–2002

- Table 8 presents a comparison of the relative proportions of persons reported with AIDS who are living and deceased by gender, age group, ethnicity, and mode of transmission. These data demonstrate changes in the demography of the epidemic and are useful when planning for future health needs of persons with AIDS in Orange County. For example, the proportion of persons living with AIDS who are female is greater than the proportion of females among those who have died (11% vs. 7%). This is likely to be a reflection of the recent increase in cases attributed to heterosexual transmission and to injection-drug use among women, consistent with national trends.

Table 8. Orange County AIDS Cases by Survival Status

(As of December 2002)	Living		Deceased	
Total	2928	100%	3278	100%
Gender				
Male	2606	89%	3052	93%
Female	322	11%	226	7%
Age at Diagnosis				
<20	34	1%	24	<1%
20-29	605	21%	581	18%
30-39	1327	45%	1452	44%
40-49	711	24%	771	24%
50+	251	9%	450	14%
Race/Ethnicity				
White	1649	56%	2435	74%
African-American	167	6%	142	4%
Latino	1020	35%	643	20%
A/PI	72	2%	47	1%
Other/unknown	20	<1%	8	<1%
Mode of Transmission				
MSM	2031	69%	2394	73%
IDU	359	12%	343	10%
MSM + IDU	146	5%	226	7%
Heterosexual	240	8%	117	4%
Adult Other	29	1%	89	3%
Unknown Risk	100	3%	91	3%
Pediatric	23	<1%	19	<1%
Source: HIV/AIDS Reporting System (HARS), 2002				

- These data also demonstrate the increasing proportion of AIDS cases among persons of color (44% of living cases compared to 26% deceased) emphasizing the need for services that are tailored both culturally and linguistically to the “changing face” of the epidemic, as well as to the unique needs of women with HIV disease.
- Changes in the risk profile of persons living with AIDS are also apparent. The decline in the number of gay and bisexual men living with AIDS is likely to reflect the behavior change that was initiated in the gay community in the early 1980s. Heterosexuals and injection-drug users represent greater proportions of those who are living with AIDS, while gay and bisexual males represent a greater proportion of those who are deceased.
- In Figure 14 records from Orange County mortality data (vital statistics on deaths) are used to present AIDS-related death rates per 100,000 population between 1997–2001 by year of death. These rates also demonstrate a downward trend.

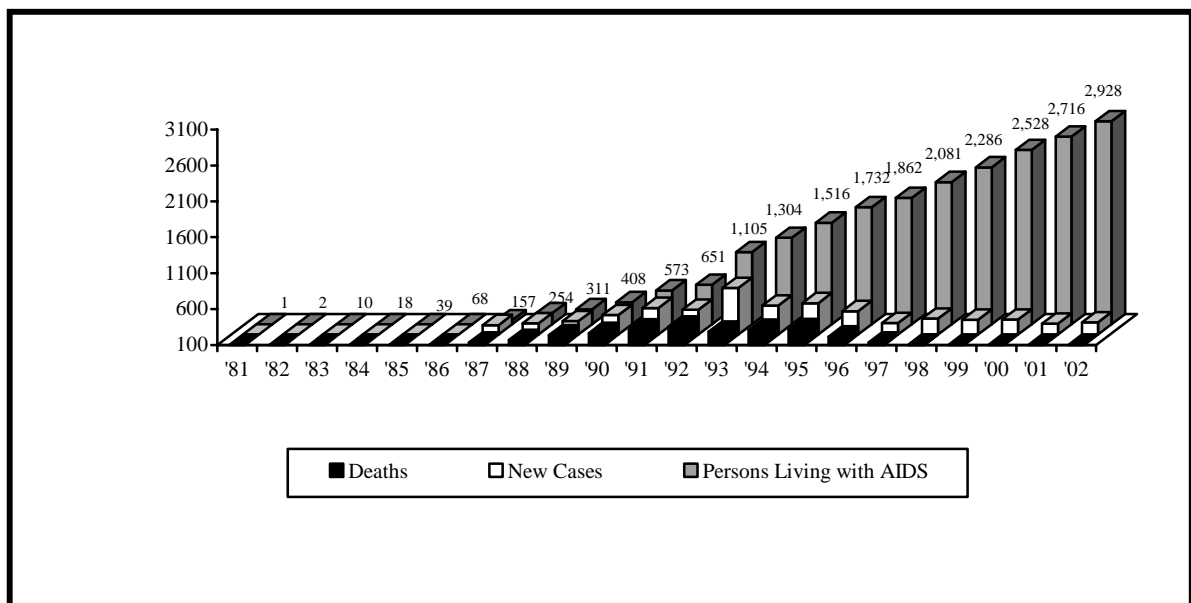


Source: HIV/AIDS Reporting System (HARS), 2002; Population: DOF, 2004; HCA Epidemiology & Assessment, 2003

Figure 14. AIDS Death Rates per 100,000, Orange County, 1997–2001

4.3 Persons Living with AIDS (PLWA)

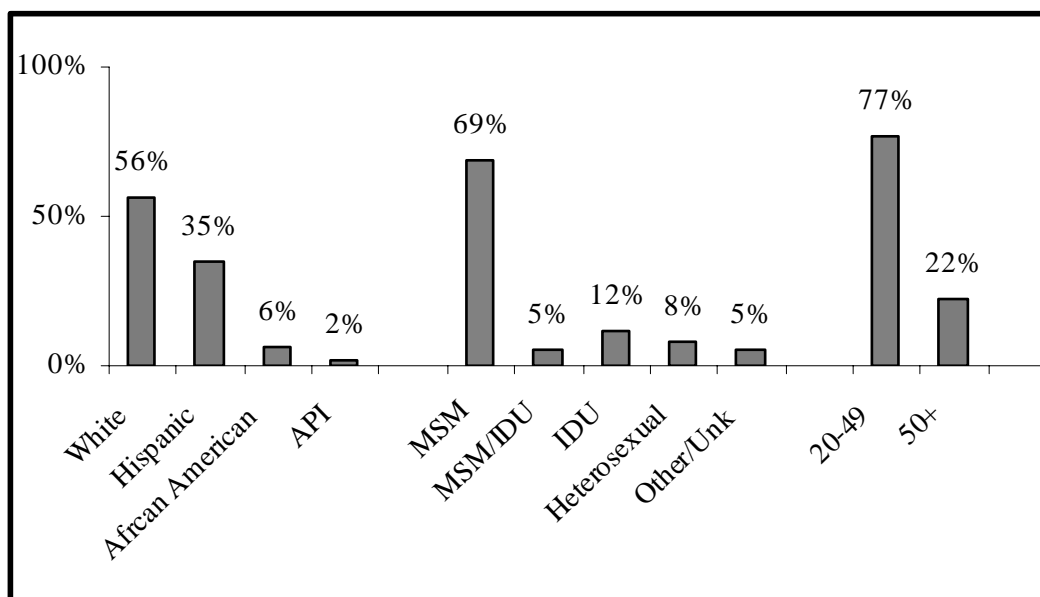
As of December 2002, an estimated 2,928 Orange County residents were living with AIDS (it is important to note that this number includes only those cases reported as AIDS to the local HARS data base, and includes persons with AIDS whose vital status is unknown). Figure 15 presents AIDS deaths by year of occurrence, new cases by year of diagnosis, and persons living with AIDS (prevalence) at the close of each year since the beginning of the epidemic in 1981.



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 15. AIDS Deaths, New Cases, and Prevalence by Year, Orange County, 1981-2002

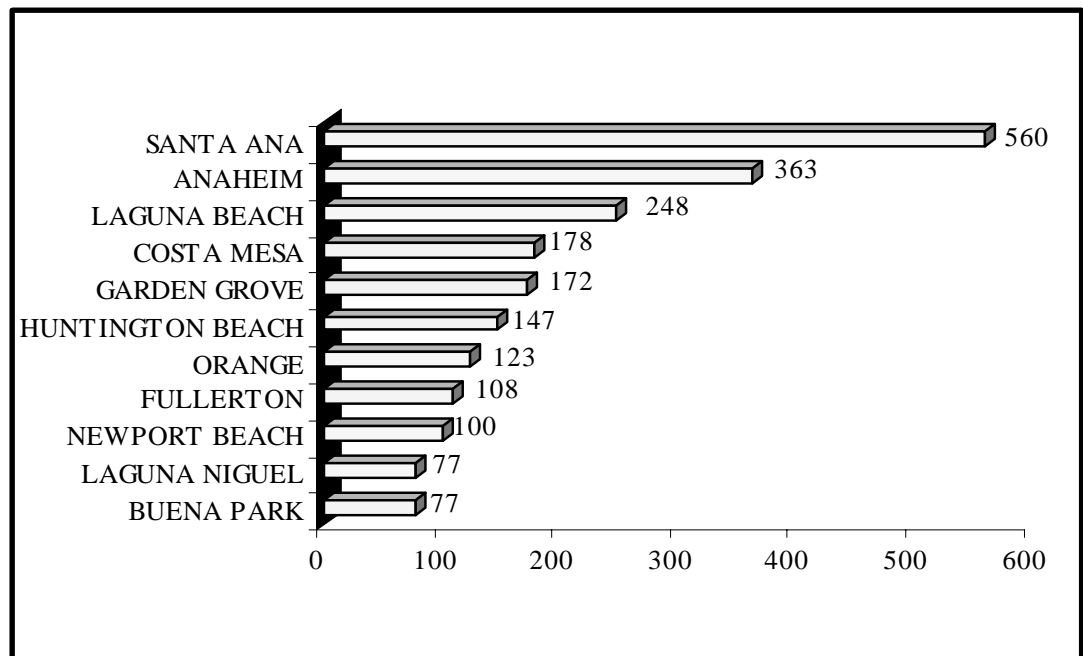
- Males accounted for 89% of prevalent cases of AIDS in 2002. As depicted in Figure 16, 56% of cases were White; 35% were Hispanic; and 6% were African-American.
- Men having sex with men (MSM) accounted for the largest proportion of prevalent cases (69%), followed by injection drug users (12%), and persons infected through heterosexual contact (8%). Men having sex with men and injecting drugs (MSM/IDU) accounted for 5% of prevalent cases, and the remaining 5% were attributed to the other/unknown risk category.
- Seventy-seven percent of living AIDS cases were between the ages of 20 and 49 years at the end of December 2002.



Source: HIV/AIDS Reporting System (HARS), 2002

Figure 16. Persons Living With AIDS (PLWA) by Race/Ethnicity, Mode of Transmission, and Age (current), Orange County, December, 2002

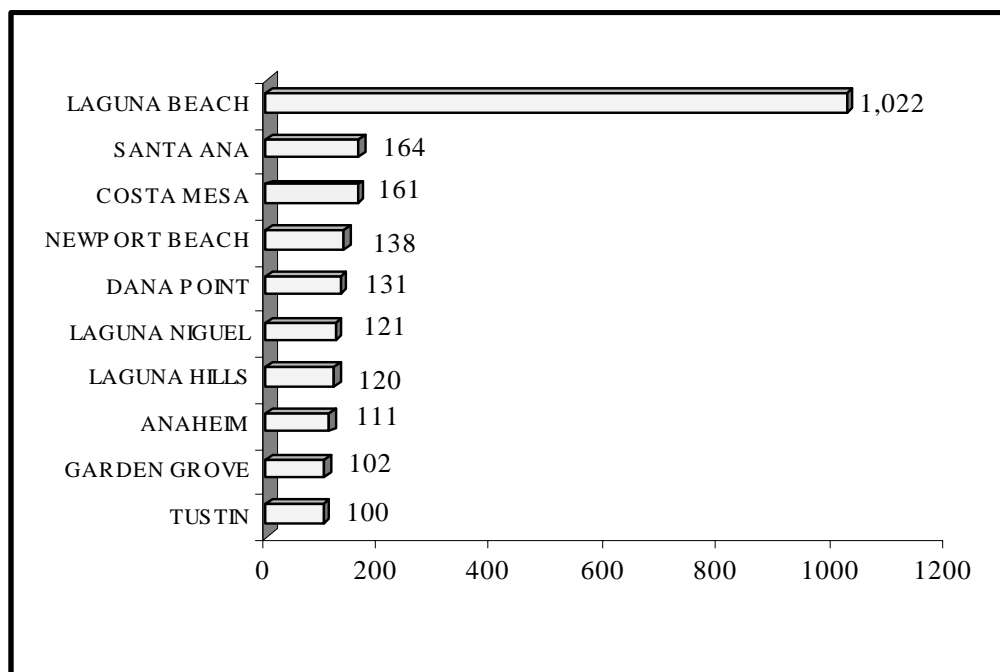
- Figure 17 presents the number of PLWA by city of residence at the time of diagnosis; data is presented for the top 11 cities with the highest number of PLWA.
- As depicted in Figure 17, 73% of PLWA as of December 2002 (n=2,928), resided in one of these 11 cities at the time of their AIDS diagnosis.



Source HIV/AIDS Reporting System (HARS), 2002

Figure 17. Number of Persons Living With AIDS (PLWA) by City of Residence at time of Diagnosis (Top 11 Cities), Orange County, December, 2002

- Figure 18 presents the rate per 100,000 population by the city of residence at the time of diagnosis.
- Although the majority of PLWA resided in Santa Ana at the time of diagnosis (n=560), Laguna Beach had the highest rate per 100,000 population. The rate for Laguna Beach was 1,022 per 100,000 population, followed by Santa Ana (163/100,000 population) and Costa Mesa (161/100,000 population).



Source: HIV/AIDS Reporting System (HARS), 2002: DOF, 2004

Figure 18. Rates for Persons Living With AIDS (PLWA) in Orange County by City of Residence per 100,000, at time of Diagnosis (Top 10 Cities), as of December 2002

5. HIV IN ORANGE COUNTY

5.1. HIV Reporting

Beginning July 1, 2002, human immunodeficiency virus (HIV) infection has joined the list of reportable diseases in California. HIV is reportable via a non-name code. Similar to AIDS reporting, health care providers and laboratories are required to report individuals with HIV infection to the health department within 7 calendar days. It is expected that HIV reporting will provide better epidemiological data for persons at all stages of the disease, define the incidence rate and trends for HIV, and demonstrate the impact that the epidemic has on the health care system. The AIDS Surveillance unit in Orange County is taking all measures to ensure timely reporting of HIV cases, and is strengthening its collaboration with the laboratories and health care providers in the jurisdiction. In the first fifteen months of HIV reporting, 1,215 HIV cases have been reported.

5.2. HIV and Local Data

Data presented in Table 9 characterizes the demographics of HIV cases reported during the first fifteen months (July 1, 2002 through September 30, 2003) in Orange County.

Table 9. HIV Reporting in Orange County, July 1, 2002 through September 30, 2003

HIV CASES REPORTED		
#	%	
1,215		Total Cases
1,206	99%	Adult cases
9	<1%	Pediatric cases
ADULT Cases by Exposure Category (at time of diagnosis)		
838	69%	Men having Sex With Men (MSM)
106	9%	Injection Drug Use
43	4%	Men having Sex with Men and Inject drugs (MSM+IDU)
141	12%	Heterosexual Contact
5	0%	Hemophilia / Coagulation Disorder
7	1%	Receipt of Blood, Components, or Tissues
66	5%	Risk not Reported /Unknown
PEDIATRIC Cases by Exposure Category (at time of diagnosis)		
1	11%	Hemophilia / Coagulation Disorder
7	78%	Perinatal (Mother with/at risk for HIV infection)
1	11%	Risk not Reported /Unknown
Cases by Race/Ethnicity		
627	52%	White
58	5%	African-American
455	37%	Hispanic
44	4%	Asian / Pacific Islander
2	0%	American Indian/Alaska Native
29	2%	Other / Unknown
Cases by Gender		
1,039	86%	Male
174	14%	Female
2	<1%	Unknown
Cases by Age at HIV Diagnosis (in Years)		
5	<1%	Under 5
4	<1%	5-12
19	2%	13-19
380	31%	20-29
506	42%	30-39
220	18%	40-49
81	7%	50 and over
Source: HARS, 2003		

Source: HIV/AIDS Reporting System (HARS), 2003

5.3. HIV Testing Data

Data presented in this section is obtained from HIV Counseling and Testing services offered by the County of Orange. It provides basic demographic information relating to the HIV-positive community and for those utilizing the counseling and testing services. Since most of the data sources described here do not contain a unique identifier to protect the confidentiality of those testing, the data may contain duplicate records. HIV counseling and testing is offered at various sites throughout the County of Orange. Table 10 presents a summary of tests performed cumulatively and in the most recent four years. Cumulatively, the seropositivity of all tests is 1.6%. Less than 1% of tests in the past several years have been positive.

Table 10. HIV Counseling and Testing Data Summary, Orange County, 2002

Year Test Performed	No. of Tests	No. of Positive Tests	% Positive Tests
Cumulative	280,466	4,456	1.6
1999	15,329	123	0.8
2000	14,979	121	0.8
2001	13,629	112	0.8
2002	13,509	121	0.9
Source: : HIV Counseling Information System, 2002			

There are three major HIV Counseling and Testing sites offering anonymous and or confidential testing in Orange County. In the absence of confirmed HIV reporting, the demographic distribution of those testing positive at these sites provides some idea of the characteristics of the HIV-positive community.

Anonymous HIV Testing Program

- The California State Office of AIDS developed the Alternative Test Site (ATS) program for individuals wanting to know their HIV antibody status. One site was established in the Health Care Agency's Special Diseases Clinic, which opened June 1, 1985. The HIV antibody test administered in an ATS addresses the confidentiality concerns of individuals at risk for HIV infection. All testing is anonymous and includes test-linked education.
- Between June 1, 1985, and December 31, 2002, 135,899 specimens were tested anonymously. Of these, 3,114 (2.3%) were found to have serologic evidence of HIV infection.
- In the most recent five-year period (1998–2002), 18,179 tests were performed with a sero-positivity of 1.5% ($n=267$).
- Table 11 presents the cumulative results for HIV tests performed between 1998 and 2002 at the Orange County Alternative Test Site. Of the 18,179 cumulative clients presenting for anonymous testing, 45% were White, 42% were Hispanic, 3% were African-American, and 7% were API. Race/ethnicity was other/unknown for 2% of those tested.
- Among persons testing at the ATS, African-Americans (2.2%) and Hispanics (2.3%) were more likely to test positive than Whites (0.8%), or APIs (0.7%).
- The proportion of positive tests among males was more than twice that for females (1.9% vs. 0.8%).
- By risk factor, 51% of positive tests ($n=137$) were MSM or MSM/IDU, followed by those reporting multiple partners ($n=26$) and partners of HIV-positive individuals ($n=23$). The percentage of positive tests for injection drug users was about 2% ($n=13$). Less than one percent (0.9%) of tests were positive when risk of HIV infection was not reported at the time of testing. These data support the continued need for effective outreach to encourage testing for all persons who engage in behaviors that place them at increased risk for HIV infection.

Table 11. Anonymous HIV Test Results by Risk Factor, Race/Ethnicity and Gender, Orange County, 1998-2002

	Total Tested	Positive Tests	Percent Positive (%)
Risk Factor			
MSM	3,274	130	4.0
MSM/IDU	75	7	9.3
Bisexual Female	124	0	--
Injection-drug use	648	13	2.0
Partner of HIV+	411	23	5.6
Partner of Bisexual	177	3	1.7
Partner of IDU	507	1	0.2
Sex for Money or Drug	64	0	--
Transfusion Recipient	130	7	5.4
Multiple Partners	6,760	26	0.4
Occupational Exposure	71	2	2.8
No Reported Risk	5,929	55	0.9
Unknown	9	0	--
Race/Ethnicity			
White	8,181	63	0.8
African- American	535	12	2.2
Hispanic	7,596	177	2.3
A/PI	1,201	8	0.7
Other/Unknown	666	7	1.2
Gender			
Male	11,394	216	1.9
Female	6,737	51	0.8
Unknown	48	0	--
TOTAL	18,179	267	1.5
Source: HIV Counseling Information System, 2002			

Confidential HIV Testing Program

Confidential testing has been offered at the HCA Special Diseases Clinic in Santa Ana and through special outreach testing efforts since March 1985.

- Between March 1, 1985, and December 31, 2002, 58,314 specimens were tested confidentially at the Special Diseases Clinic. Of these, 475 (0.8%) were found to have serologic evidence of HIV infection.
- In the most recent five-year period (1998–2002), 32,247 tests were performed, of which 181 (0.6%) were positive.
- Table 12 presents results of cumulative confidential tests performed between 1998–2002 by risk factor, race/ethnicity, and gender. More than half (56%) of those tested confidentially were Hispanic, 29% were White, 4% were African-American, and 8% were API. Ethnicity was unknown/other for 3% of those testing confidentially. The over-representation of people of color among this group compared with those testing anonymously is a reflection of the clients who are currently accessing the Special Diseases Clinic located in Santa Ana.
- As shown in Table 12, there was little difference within ethnic groups in terms of prevalence of HIV infection; positivity was equal to or less than 1% for all groups. The percentage of positive tests in males was four times higher than in females (0.8% vs. 0.2%).
- Cumulative seroprevalence for the recent years 1998–2002 among MSM was 3% (5% for MSM/IDU). Sero-prevalence was highest (6%) for those having HIV positive partners. More than half (57%) of the 181 infections identified in this program were associated with MSM, followed by individuals reporting multiple sex partners (16%) and those who did not report any risk (11%).
- Twenty children at risk were also tested during the period 1998–2002, and one was HIV-positive (5%). However, these small numbers are subject to random variation.

Table 12. Confidential HIV Test Results by Risk Factor, Race/Ethnicity and Gender, Orange County, 1998–2002

	Total Tested	Positive Tests	Percent Positive (%)
Risk Factor			
MSM	3,553	101	2.8
MSM/IDU	62	3	4.8
Bisexual Female	236	0	--
Injection-drug use	1,066	8	0.8
Partner of HIV+	148	9	6.1
Partner of Bisexual	191	0	--
Partner of IDU	1,029	6	0.6
Sex for Money or Drug	138	2	1.4
Transfusion Recipient	185	2	1.1
Multiple Partners	14,177	29	0.2
Occupational Exposure	71	0	--
Child at Risk	20	1	5.0
No Reported Risk	11,360	20	0.2
Unknown	11	0	--
Race/Ethnicity			
White	9,315	28	0.3
African-American	1,245	15	1.2
Hispanic	17,955	128	0.7
A/PI	2,520	4	0.2
Other/Unknown	1,212	6	0.4
Gender			
Male	19,193	152	0.8
Female	12,994	28	0.2
Unknown	60	1	1.7
TOTAL	32,247	181	0.6
Source: HIV Counseling Information System, 2002			

Methadone/Drug Clinics HIV Testing Program

Confidential HIV antibody counseling and testing was implemented in HCA's methadone and drug treatment clinics in August 1987.

- Between August 1, 1987, and December 31, 2002, 45,275 specimens were tested confidentially at HCA's methadone and drug treatment clinics. Of these, 398 (0.9%) were found to have serologic evidence of HIV infection.
- Seroprevalence for the most recent five-year period (1998-2002) was 0.6%
- Table 13 presents cumulative data for methadone and drug treatment tests by risk factor, ethnicity, and gender for the period 1998–2002. Among clients presenting for testing at methadone and drug treatment clinics, 58% were White, 26% Hispanic, 9% African-American and 2% API. Ethnicity was unknown/other for 4% of those tested.
- The majority (44%) of those testing positive were White, 29% were Hispanic, and 23% were African-American; ethnicity was unknown/other for 4%. The prevalence of HIV infection among specimens submitted by African-Americans was almost four times that for Whites (1.5% vs.0.4%).
- Cumulative sero-prevalence was highest among MSM/IDU (2.2%), MSM (2.0%), partners of HIV positive persons (1.1%), transfusion recipients (0.8%), and injection drug users (0.7%).

Table 13. Methadone/Drug Clinic HIV Test Results by Risk Factor, Race/Ethnicity and Gender, Orange County, 1998-2002

	Total Tested	Positive Tests	Percent Positive (%)
Risk Factor			
MSM	345	7	2.0
MSM/IDU	224	5	2.2
Bisexual Female	369	0	--
Injection-drug use	5,203	36	0.7
Partner of HIV+	176	2	1.1
Partner of Bisexual	234	0	--
Partner of IDU	1,879	3	0.2
Sex for Money or Drug	225	1	0.4
Transfusion Recipient	124	1	0.8
Multiple Partners	2,843	15	0.5
Occupational Exposure	58	0	--
No Reported Risk	2,951	17	0.6
Unknown	24	0	--
Race/Ethnicity			
White	8,558	38	0.4
African-American	1,357	20	1.5
Hispanic	3,875	25	0.6
A/PI	224	0	--
Other/Unknown	641	4	0.6
Gender			
Male	8,630	69	0.8
Female	5,976	17	0.3
Unknown	49	1	2.0
TOTAL	14,655	87	0.6
Source: HIV Counseling Information System, 2002			

6. CONCLUSIONS

As of December 2001 (latest available data), Orange County has reported more AIDS cases than 25 U.S. states and ranked 28th in number of AIDS cases reported among the 101 metropolitan areas with 500,000 or more population recognized by the CDC. The AIDS case rate per 100,000 population in 2002 for Orange County was 9.1, compared to 12.4 for California, and 15.0 for the U.S. The first resident case of AIDS in Orange County was reported to the CDC in 1981. Since then more than six thousand (n= 6,206) AIDS cases have been reported. As of December 2002, of these 6,206 cases 2,928 are living and 3,278 are deceased, representing a cumulative case fatality rate of 53%.

Consistent with the national and the state trends, the earlier AIDS infections were mostly among gay, white males; in recent years, however, persons of color contribute to a larger proportion of cases. The proportion of AIDS cases in females has also increased over time with a greater proportion of cases attributable to heterosexual transmission.

With the advancement in anti-retroviral therapy and better management of AIDS cases, AIDS-related mortality has declined over the years and more persons are now living with AIDS (PLWA) in Orange County. The majority of these PLWA were males, and 77% were in the age group of 20-49 years at the end of December 2002.

HIV reporting began in July 2002 in Orange County; in the first 15 months of reporting, 1,215 cases were reported with the majority between the ages of 20-49 at the time of diagnosis. Reporting is expected to provide a better understanding of the demographics and risk patterns in the population and to supplement outreach efforts to address the needs of the HIV infected population. Within several years it will be possible to discern trends in HIV diagnosis. Testing and counseling data has been used in the absence of reliable HIV surveillance data and has offered some insight into the characteristics of the high-risk population. Testing and counseling data reveal that the testing sites are utilized by the minority population; however, due to the anonymity of some sites duplication of data is a concern.

APPENDICES

Appendix 1

Data Set Information

HIV/AIDS Data:

HIV/AIDS Reporting System (HARS):

The CDC's HARS registry is maintained by the HIV/AIDS Surveillance and Monitoring Program of the Orange County Health Care Agency. It includes all reported cases of AIDS who are residents of Orange County. Effective July 1, 2002, this registry is also tracking HIV cases based on a non-name coding system. All data related to resident cases presented in this report is obtained from HARS.

Population Data:

State of California Department of Finance (DOF)

State of California , Department of Finance, *E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2002 and 2003*. Sacramento, California, May 2003.

State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, May 2004. State of California,

State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 1990–1999. Sacramento, CA, May 2004.

Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 1970-2040*. Sacramento California, December 1998.

Center for Demographic Research Cal State Fullerton, CA

CDR, Cal State Fullerton, *Fall 2002 Population Estimates*.

Mortality Data

HARS

OCHCA Epidemiology and Assessment

HIV Testing and Counseling Data

State of California, Health and Human Services, State Office of AIDS, *HIV Counseling Information System*, 2002.

Calculations of Rates:

- Population based rates are calculated by using the population figure from DOF data sets; the numerator represents the number of cases in a particular sub-population (or whole population). The rate is expressed per 100,000 population.

Data Limitations:

- Reported vs. Diagnosed cases: data presented in this report unless otherwise mentioned represents the number of AIDS cases reported in a particular year; caution must be taken in interpreting the data since all cases may not be incident cases (diagnosed in the same year as reported).
- Surveillance data is revised as duplicated cases are removed at the state level. Therefore, the total numbers presented for a particular period are subject to revision.
- The rates presented in Figure 18 are based on the assumption that all living AIDS cases are still residing in the cities where they were diagnosed.

Suggested Citation:

County of Orange, Health Care Agency, HIV/AIDS Surveillance and Monitoring Program. Disease Control and Epidemiology. *HIV/AIDS Surveillance Statistics, 2002*. Issued July 2004.

Appendix 2

AIDS Cases by Race/Ethnicity and Year of Report, Orange County							
Year Reported	Hispanic	American Indian	African American	White	API	Unknown	Total
1981	1	0	0	1	0	0	2
1982	0	0	0	2	0	0	2
1983	3	0	1	7	0	0	11
1984	3	0	0	31	1	0	35
1985	9	0	2	48	0	0	59
1986	10	0	0	81	2	0	93
1987	23	1	5	200	2	1	232
1988	32	0	9	214	1	0	256
1989	46	0	5	228	4	3	286
1990	49	0	13	307	3	0	372
1991	97	0	15	352	6	2	472
1992	96	2	22	320	7	1	448
1993	204	2	48	484	12	0	750
1994	129	1	23	338	12	1	504
1995	136	0	27	363	11	2	539
1996	119	4	23	270	11	0	427
1997	95	0	19	137	9	0	260
1998	115	1	18	179	10	0	323
1999	128	0	25	148	4	2	307
2000	139	0	18	146	6	0	309
2001	97	0	15	124	10	5	251
2002	132	2	21	104	8	1	268
Total	1,663	13	309	4,084	119	18	6,206

Source: HIV/AIDS Reporting System (HARS), 2002

Appendix 3

AIDS Cases By Race/Ethnicity, Gender and Year of Report, Orange County							
Male							
Year Reported	Hispanic	Am. Indian	African-American	White	API	Unknown	Total
1981	1	0	0	1	0	0	2
1982	0	0	0	2	0	0	2
1983	3	0	1	7	0	0	11
1984	2	0	0	30	1	0	33
1985	9	0	2	47	0	0	58
1986	10	0	0	77	2	0	89
1987	22	1	5	195	2	1	226
1988	31	0	7	200	1	0	239
1989	42	0	4	219	4	3	272
1990	46	0	13	293	3	0	355
1991	87	0	12	337	4	2	442
1992	88	2	20	299	7	1	417
1993	182	2	39	450	10	0	683
1994	112	1	20	318	11	1	463
1995	122	0	22	327	8	1	480
1996	100	3	17	246	11	0	377
1997	80	0	18	127	8	0	233
1998	102	1	16	158	10	0	287
1999	113	0	19	130	2	2	266
2000	119	0	14	134	5	0	272
2001	85	0	12	108	9	5	219
2002	115	1	17	92	6	1	232
Sub Total	1,471	11	258	3,797	104	17	5,658
Female							
1984	1	0	0	1	0	0	2
1985	0	0	0	1	0	0	1
1986	0	0	0	4	0	0	4
1987	1	0	0	5	0	0	6
1988	1	0	2	14	0	0	17
1989	4	0	1	9	0	0	14
1990	3	0	0	14	0	0	17
1991	10	0	3	15	2	0	30
1992	8	0	2	21	0	0	31
1993	22	0	9	34	2	0	67
1994	17	0	3	20	1	0	41
1995	14	0	5	36	3	1	59
1996	19	1	6	24	0	0	50
1997	15	0	1	10	1	0	27
1998	13	0	2	21	0	0	36
1999	15	0	6	18	2	0	41
2000	20	0	4	12	1	0	37
2001	12	0	3	16	1	0	32
2002	17	1	4	12	2	0	36
Sub Total	192	2	51	287	15	1	548
Source: HIV/AIDS Reporting System (HARS), 2002							

Appendix 4

Cumulative AIDS Cases by Race/Ethnicity and Mode of Transmission, Orange County, 1981-2002							
	Hispanic	Am.Indian	African Am.	White	API	Unknown	Total
Male							
MSM	1047	7	159	3117	79	16	4,425
MSM/IDU	82	2	18	266	4	0	372
IDU	200	2	60	246	7	0	515
Heterosexual Contact	40	0	6	41	0	0	87
Adult-Other	14	0	4	54	6	0	78
Adult-Unknown Risk	77	0	10	62	7	1	157
M w HIV HIV-Risk	9	0	0	6	0	0	15
Peds-Other	1	0	1	5	1	0	8
Peds-Unknown Risk	1	0	0	0	0	0	1
Sub Total	1,471	11	258	3,797	104	17	5,658
Female							
IDU	44	0	23	118	1	1	187
Heterosexual Contact	115	2	20	124	9	0	270
Adult-Other	10	0	2	25	2	0	39
Adult-Unknown Risk	15	0	4	13	2	0	34
M w HIV HIV-Risk	7	0	2	4	1	0	14
Peds-Other	0	0	0	3	0	0	3
Peds-Unknown Risk	1	0	0	0	0	0	1
Sub Total	192	2	51	287	15	1	548
ALL							
MSM	1047	7	159	3117	79	16	4425
MSM/IDU	82	2	18	266	4	0	372
IDU	244	2	83	364	8	1	702
Heterosexual Contact	155	2	26	165	9	0	357
Adult-Other	24	0	6	79	8	0	117
Unknown Risk	92	0	14	75	9	1	191
M w HIV HIV-Risk	16	0	2	10	1	0	29
Peds-Other	1	0	1	8	1	0	11
Peds-Unknown Risk	2	0	0	0	0	0	2
Total	1,663	13	309	4,084	119	18	6,206

Source: HIV/AIDS Reporting System (HARS), 2002

Appendix 5

Cumulative AIDS Cases by Race/Ethnicity, Gender and Age at Diagnosis, Orange County, 1981-2002							
Male	0-12	13-24	25-29	30-34	35-39	40+	Total
Hispanic	10	98	318	372	285	388	1,471
American Indian	0	0	4	5	1	1	11
African American	1	5	32	60	66	94	258
White	9	91	518	839	873	1,467	3,797
API	1	4	19	18	22	40	104
Unknown	0	0	1	5	2	9	17
Sub Total	21	198	892	1,299	1,249	1,999	5,658
Female							
Hispanic	7	18	35	48	31	53	192
American Indian	0	1	0	0	0	1	2
African American	2	0	4	10	18	17	51
White	5	12	43	52	65	110	287
API	1	1	4	4	2	3	15
Unknown	0	0	0	1	0	0	1
Sub Total	15	32	86	115	116	184	548
ALL							
Hispanic	17	116	353	420	316	441	1,663
American Indian	0	1	4	5	1	2	13
African American	3	5	36	70	84	111	309
White	14	103	561	891	938	1,577	4,084
API	2	5	23	22	24	43	119
Unknown	0	0	1	6	2	9	18
TOTAL	36	230	978	1,414	1,365	2,183	6,206
Source: HIV/AIDS Reporting System (HARS), 2002							

Appendix 6

Cumulative AIDS Cases by Mode of Transmission, Gender and Age at Diagnosis, Orange County, 1981-2002						
Male	0-12	13-19	20-24	25-44	45+	Total
MSM	0	7	131	3,356	931	4,425
MSM/IDU	0	2	13	310	47	372
IDU	0	0	21	408	86	515
Heterosexual Contact	0	1	6	60	20	87
Adult-Other	0	1	4	38	35	78
Unknown Risk	0	1	8	101	47	157
Perinatal	15	0	0	0	0	15
Ped-Other	6	2	0	0	0	8
Ped Unknown Risk	0	0	1	0	0	1
Sub Total	21	14	184	4,273	1,166	5,658
Female						
IDU	0	1	3	165	18	187
Heterosexual Contact	0	2	19	197	52	270
Adult-Other	0	2	1	15	21	39
Unknown Risk	0	0	1	22	11	34
Perinatal Transmission	14	0	0	0	0	14
Pediatric-Other	1	2	0	0	0	3
Pediatric-Unknown Risk	0	1	0	0	0	1
Sub Total	15	8	24	399	102	548
All						
MSM	0	7	131	3,356	931	4,425
MSM/IDU	0	2	13	310	47	372
IV drug user	0	1	24	573	104	702
Heterosexual Contact	0	3	25	257	72	357
Adult-Other	0	3	5	53	56	117
Unknown Risk	0	1	9	123	58	191
Perinatal Transmission	29	0	0	0	0	29
Pediatric-Other	7	4	0	0	0	11
Pediatric-Unknown Risk	0	1	1	0	0	2
Total	36	22	208	4,672	1,268	6,206
Source: HIV/AIDS Reporting System (HARS), 2002						

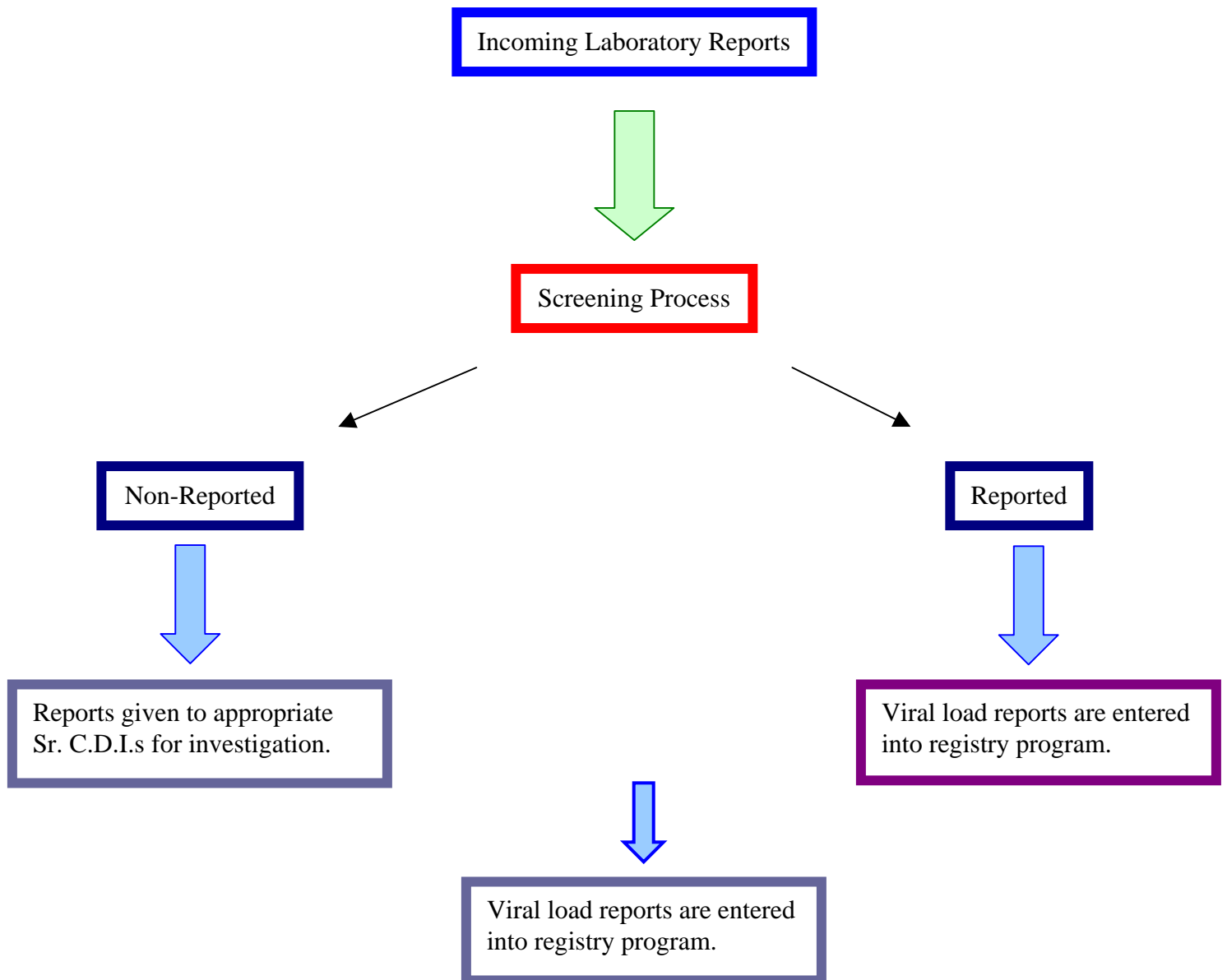
Appendix 7

Persons Living With AIDS (PLWA) Orange County, 1981-2002			
Year	Male	Female	Total
1981	1	0	1
1982	2	0	2
1983	10	0	10
1984	18	0	18
1985	39	0	39
1986	65	3	68
1987	152	5	157
1988	239	15	254
1989	291	20	311
1990	390	18	408
1991	539	34	573
1992	607	44	651
1993	1,011	94	1,105
1994	1,194	110	1,304
1995	1,367	149	1,516
1996	1,551	181	1,732
1997	1,666	196	1,862
1998	1,860	221	2,081
1999	2,036	250	2,286
2000	2,251	277	2,528
2001	2,419	297	2,716
2002	2,606	322	2,928
Source: HIV/AIDS Reporting System (HARS), 2002			

Appendix 8 A

HIV Reporting Process in Orange County

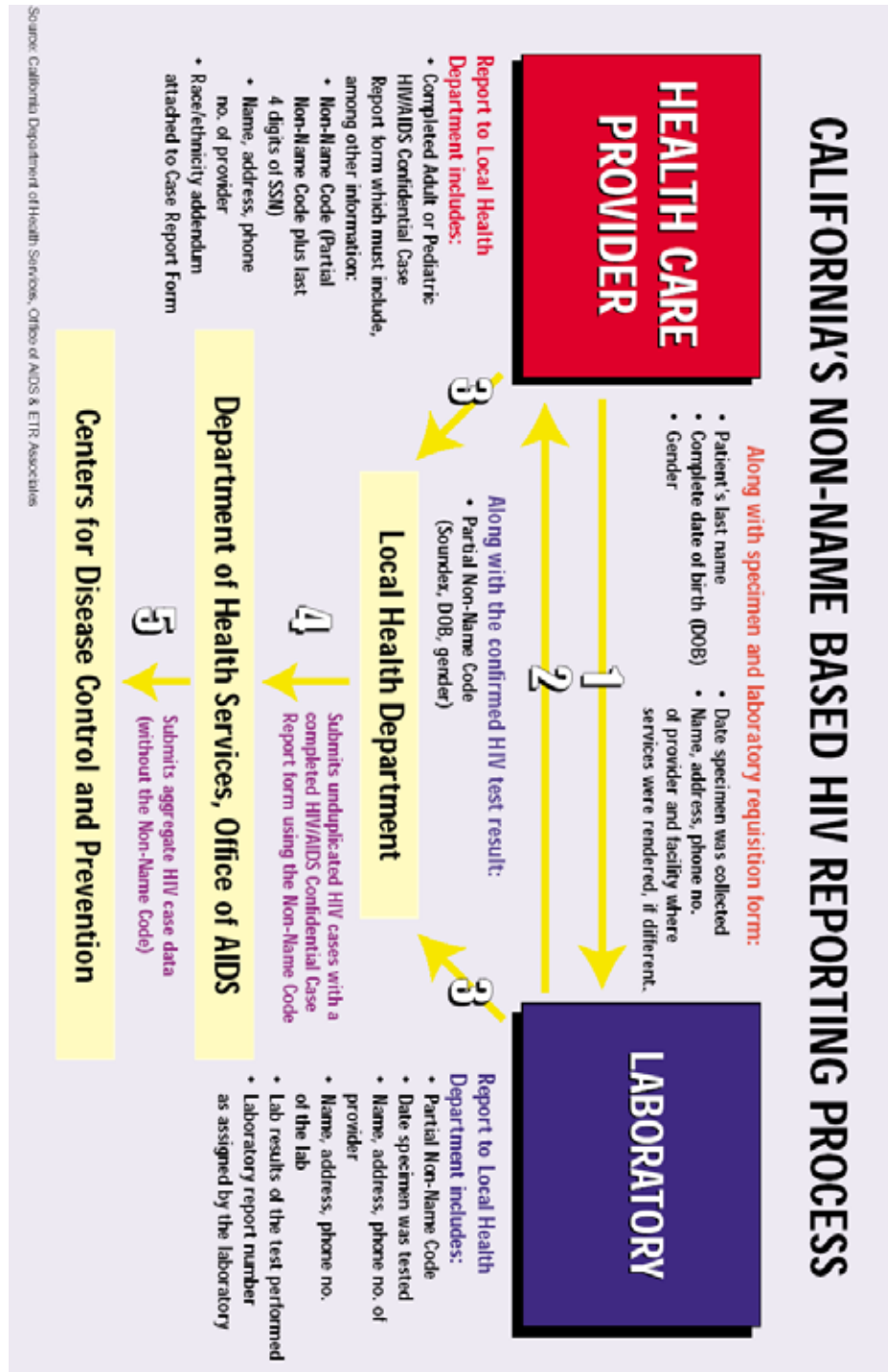
Laboratory Report Clearance and Entry into Registry Program



Appendix 8 B

California's Non-Name Based HIV Reporting Process

<http://www.dhs.cahwnet.gov/ps/ooa/hivreporting/pdf/HIV%20poster102703.pdf>



Appendix 9

1993 Revised Classification System for HIV Infection* and Expanded AIDS Surveillance Case Definition for Adolescents and Adults**

CD4+ T-Cell Categories (per micro liter):	Clinical Categories		
	(A) Asymptomatic, Acute (primary) HIV or PGL***	(B) Symptomatic, not (A) or (C) conditions	(C) AIDS-indicator conditions
(1) ≥ 500 ($\geq 29\%$)	A1	B1	C1
(2) 200 – 499 (14 – 28%)	A2	B2	C2
(3) < 200 ($< 14\%$) AIDS	A3	B3	C3
(4) Unknown T-cell count	A4	B4	C4

* Criteria for HIV infection for persons 13 years of age and over: a) repeatedly reactive screening test for HIV antibody (e.g., enzyme immunoassay) with specific antibody identified by the use of supplemental tests (e.g., Western blot, immunofluorescence assay); b) direct identification of virus in host tissues by virus isolation; c) HIV antigen detection; or d) a positive result on any other highly specific licensed test for HIV.

** The shaded cells illustrate the expanded AIDS surveillance case definition. Persons with an AIDS-indicator condition (Category C) as well as those with CD4+ T-lymphocyte counts of less than 200 per micro liter (Categories A3 or B3) are reportable as AIDS cases in the United States and territories, effective January 1, 1993.

*** PGL = persistent generalized lymphadenopathy.

Indicator Conditions Included in the 1993 AIDS Surveillance Case Definition (conditions added in the 1993 expansion of the AIDS surveillance case definition are in *italics*)

- Candidiasis on bronchi, trachea, or lungs
- Candidiasis, esophageal
- Cervical cancer, invasive
- Coccidioidomycosis, disseminated or extrapulmonary
- Cryptococcosis, extrapulmonary
- Cryptosporidiosis, chronic intestinal (> 1 month duration)
- Cytomegalovirus disease (other than liver, spleen, or nodes)
- Cytomegalovirus retinitis (with loss of vision)
- Encephalopathy, HIV-related
- Herpes simplex: chronic ulcer(s) (> 1 month duration) or bronchitis, pneumonitis, or esophagitis
- Histoplasmosis, disseminated or extrapulmonary
- Isosporiasis, chronic intestinal (> 1 month duration)
- Kaposi's sarcoma
- Lymphoma, Burkitt's (or equivalent term)
- Lymphoma, immunoblastic (or equivalent term)
- Lymphoma, primary in brain
- Mycobacterium avium complex or mycobacterium kansasii, disseminated or extrapulmonary
- Mycobacterium tuberculosis, disseminated or extrapulmonary
- Mycobacterium tuberculosis, pulmonary
- Mycobacterium, other species
- Pneumocystis carinii pneumonia
- Pneumonia, recurrent
- Progressive multifocal leukoencephalopathy
- Salmonella septicemia, recurrent
- Toxoplasmosis of brain
- Wasting syndrome due to HIV